

## GLUCOSYLTRANSFERASE IMMUNOGENS

### ABSTRACT

Vaccine compositions and immunogenic compositions are described which are glucosyltransferase subunit vaccines for dental caries and which contain at least one  
5 peptide which corresponds to a sequence of glucosyltransferase containing aspartate 413, an equivalent of aspartate 413, aspartate 451, an equivalent of aspartate 451, aspartate 562, an equivalent of aspartate 562, aspartate 567, an equivalent of aspartate 567, histidine 561, an equivalent of histidine 561, tryptophan 491, an equivalent of tryptophan 491, glutamate 489, an equivalent of glutamate 489, arginine 449, an equivalent of  
10 arginine 449, or combinations thereof. These subunit vaccines elicit antibodies which protect an immunized mammal from dental caries. Methods of provoking an immune response to intact glucosyltransferase are also described.